

1 Incubators IN/IF and INplus/IFplus

The incubators with the unique ControlCOCKPIT for a quick and intuitive operation. For the gentle heating of organic chamber loads. The heating and control system are especially optimised for low temperatures of up to +80 °C.

Standard equipment:

- PID microprocessor control with integrated auto-diagnostic system
- Interior made of stainless steel, material 1.4301 (ASTM 304) with all-round deep-drawn ribs to integrate the large-area heating with ceramic-metal sheath, very stable and easy to clean
- Structured stainless steel housing, scratch-resistant, robust and durable; rear of zinc-plated steel (sizes 450 and 750 mounted on lockable castors)
- High-temperature connectors on the rear of the appliance for single-phase power connection according to country specific systems and IEC standards
- Internal data logger with a storage capacity of at least 10 years
- German, English, French, Spanish, Polish, Czech, Hungarian language settings available on the ControlCOCKPIT
- Digital backwards counter with target time setting adjustable between 1 minute and 99 days
- The SetpointWAIT function guarantees that the process time does not start until the set temperature is reached at all measuring points - optional for temperature values recorded by the freely positionable Pt100 sensors inside the chamber.
- Adjustment of three calibration values for temperature and additional appliance specific parameters directly at the ControlCOCKPIT



9.537 961

Type designation: plus = Models with TwinDISPLAY

Specifications

- Type designation: N = Natural convection, F = Forced air circulation
- Working-temperature range: at least 5 °C (IN/INplus), at least 10 °C (IF/IFplus) above ambient temperature to +80 °C
- Setting temperature range: +20 °C to +80 °C
- Setting accuracy: 0.1 °C
- Power supply: 230 V, 50/60 Hz; 115 V, 50/60 Hz no extra cost

2 Incubators IN and IF

SingleDISPLAY: ControlCOCKPIT with one colour display

Memmert

- Available parameters on the ControlCOCKPIT: Temperature (Celsius or Fahrenheit), fan speed, exhaust air flap position, programme time, time zones, summertime/wintertime
- One temperature sensor Pt100 DIN class A in a 4-wire circuit
- AtmoCONTROL software for reading out, managing and organising the data logger via Ethernet interface (temporary trial version can be downloaded). USB stick with AtmoCONTROL software available as accessory (on demand)
- Ethernet interface on the rear of the appliance for reading out the protocol log and for online logging
- Double overtemperature protection: Electronic temperature monitoring with freely adjustable monitoring temperature, with option A6 TWW/TWB (protection class 3.1 or 2), mechanical temperature limiter TB acc. to DIN 12880



9.537 961

Type	Housing (W x D x H)	Int. dimensions (W x D x H)	Internal volume	Shelf support ribs/shelves	Power consumption	Weight	PK	Cat. No.
	mm	mm	litres		W	kg		
IN30	585 x 434** x 704	400 x 250* x 320	32	3 / 1	1600	48	1	9.537 961
IN55	585 x 514** x 784	400 x 330* x 400	53	4 / 1	1000	57	1	9.537 962
IN75	585 x 514** x 944	400 x 330* x 560	74	6 / 2	1250	66	1	9.537 963
IN110	745 x 584** x 864	560 x 400* x 480	108	5 / 2	1400	76	1	9.537 964
IN160	745 x 584** x 1104	560 x 400* x 720	161	8 / 2	1600	96	1	9.537 965
IN260	824 x 684** x 1183	640 x 500* x 800	256	9 / 2	1700	110	1	9.537 966
IN450	1224 x 784** x 1247	1040 x 600* x 720	449	8 / 2	1800	161	1	9.537 967
IN750	1224 x 784** x 1726	1040 x 600* x 1200	749	14 / 2	2000	217	1	9.537 968
IF30	585 x 434** x 704	400 x 250* x 320	32	3 / 1	1600	48	1	9.537 977
IF55	585 x 514** x 784	400 x 330* x 400	53	4 / 1	1000	57	1	9.537 978
IF75	585 x 514** x 944	400 x 330* x 560	74	6 / 2	1250	66	1	9.537 979
IF110	745 x 584** x 864	560 x 400* x 480	108	5 / 2	1400	76	1	9.537 980
IF160	745 x 584** x 1104	560 x 400* x 720	161	8 / 2	1600	96	1	9.537 981
IF260	824 x 684** x 1183	640 x 500* x 800	256	9 / 2	1700	110	1	9.537 982
IF450	1224 x 784** x 1247	1040 x 600* x 720	449	8 / 2	1800	161	1	9.537 983
IF750	1224 x 784** x 1726	1040 x 600* x 1200	749	14 / 2	2000	217	1	9.537 984

Type designation: N = Natural convection, F = Forced air circulation

* Minus 39 mm for an air vent in centre of rear panel

**Depth without door handle, please add 56 mm



Incubators INplus and IFplus

TwinDISPLAY: ControlCOCKPIT with two colour displays

Memmert

- Available parameters on the ControlCOCKPIT: Temperature (Celsius or Fahrenheit), fan speed, exhaust air flap position, programme time, time zones, summertime/wintertime
- Two Pt100 sensors DIN class A in a 4-wire circuit for mutual monitoring, taking over functions in case of an error
- AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port
- HeatBALANCE function for application specific adjustment of heat output distribution (balance) between the upper and lower heating groups in an adjustment range between -50 % and +50 % (not valid for model size 30)
- ControlCOCKPIT with USB port for uploading programmes, reading out protocol logs, activating the User-ID function
- Displaying of already logged protocol data on the ControlCOCKPIT (max 10.000 values correspond to approx. 1 week)
- Ethernet interface on the rear of the appliance for reading out the protocol log and for uploading programmes and for online logging
- Multiple overtemperature protection: Electronic temperature monitoring TWW/TWB (protection class 3.1 or 2 and mechanical temperature limiter TB (protection class 1) acc. to DIN 12880, AutoSAFETY automatically adjusts to the set value within a freely adjustable tolerance range. Setting individual MIN/MAX values for over/undertemperature alarm

Type	Housing (W x D x H)	Int. dimensions (W x D x H)	Internal volume	Shelf support ribs/shelves	Power consumption	Weight	PK	Cat. No.
	mm	mm	litres		W	kg		
IN30plus	585 x 434** x 704	400 x 250* x 320	32	3 / 1	1600	48	1	9.537 969
IN55plus	585 x 514** x 784	400 x 330* x 400	53	4 / 1	1000	57	1	9.537 970
IN75plus	585 x 514** x 944	400 x 330* x 560	74	6 / 2	1250	66	1	9.537 971
IN110plus	745 x 584** x 864	560 x 400* x 480	108	5 / 2	1400	76	1	9.537 972
IN160plus	745 x 584** x 1104	560 x 400* x 720	161	8 / 2	1600	96	1	9.537 973
IN260plus	824 x 684** x 1183	640 x 500* x 800	256	9 / 2	1700	110	1	9.537 974
IN450plus	1224 x 784** x 1247	1040 x 600* x 720	449	8 / 2	1800	161	1	9.537 975
IN750plus	1224 x 784** x 1726	1040 x 600* x 1200	749	14 / 2	2000	217	1	9.537 976
IF30plus	585 x 434** x 704	400 x 250* x 320	32	3 / 1	1600	48	1	9.537 985
IF55plus	585 x 514** x 784	400 x 330* x 400	53	4 / 1	1000	57	1	9.537 986
IF75plus	585 x 514** x 944	400 x 330* x 560	74	6 / 2	1250	66	1	9.537 987
IF110plus	745 x 584** x 864	560 x 400* x 480	108	5 / 2	1400	76	1	9.537 988
IF160plus	745 x 584** x 1104	560 x 400* x 720	161	8 / 2	1600	96	1	9.537 989
IF260plus	824 x 684** x 1183	640 x 500* x 800	256	9 / 2	1700	110	1	9.537 990
IF450plus	1224 x 784** x 1247	1040 x 600* x 720	449	8 / 2	1800	161	1	9.537 991
IF750plus	1224 x 784** x 1726	1040 x 600* x 1200	749	14 / 2	2000	217	1	9.537 992

Type designation: N = Natural convection, F = Forced air circulation, plus = Models with TwinDISPLAY

* Minus 39 mm for fan

**Depth without door handle, please add 56 mm

Grids for Universal ovens and Incubators, stainless steel

Additional stainless steel shelves are available on request.

Memmert

Type	For	Description	Load max. kg	PK	Cat. No.
E28884	for model size 30	stainless steel grid	20.0	1	9.537 203
E20164	for model size 55 und 75	stainless steel grid	20.0	1	6.231 512
E20165	for model size 110 und 160	stainless steel grid	20.0	1	6.232 433
E28891	for model size 260	stainless steel grid	20.0	1	9.537 204
E20182	for model size 450 und 750	stainless steel grid	30.0	1	6.222 688
B32550	for model size UF1060 und 1060plus	stainless steel grid	60.0	1	6.266 337

Special equipment for Universal ovens and Incubators

Memmert

Type	Description	PK	Cat. No.
D00125	IQ/OQ document, with device-specific works test data for one free-selectable temperature value, incl. temperature distribution survey at Memmert for 9 measuring points to DIN 12880:2007-05 for model 30, PQ check list as support for validation by customer	1	9.867 756
D00127	IQ/OQ document, with device-specific works test data for one free-selectable temperature value, incl. temperature distribution survey at Memmert for 27 measuring points to DIN 12880:2007-05 for model 55 - 1060, PQ check list as support for validation by customer	1	9.867 757
B33170	USB User ID Stick (only for units with TwinDISPLAY)	1	6.257 480
E06192	USB Ethernet adapter	1	9.867 717
E06189	Ethernet connection cable 5 m for computer interface	1	9.867 758
B33171	USB stick with documentation Software AtmoCONTROL and operating instructions for products with SingleDISPLAY (for units with TwinDISPLAY included as standard)	1	9.867 759

1 Microbiological Incubators Heratherm™

Thermo Scientific Heratherm™ microbiological incubators are available in four different models, providing three different incubator airflow technologies in a choice of six sizes.

Heratherm Compact Incubator

The most compact unit of the Heratherm microbiological incubator family has an 18L capacity, ideal for personalized workspace.

Heratherm General Protocol Incubators

Designed for routine applications in pharmaceutical, medical, food and research laboratories.

Heratherm Advanced Protocol Incubators

Exceptional temperature performance for demanding applications.

Heratherm Advanced Protocol Security Incubators

Incorporates additional safety features for ultimate sample protection.

Safe

- Safe view of samples through internal glass door, without impact on temperature
- Safe conditions with superior temperature uniformity
- Safe containment with automatic alarm for temperature deviations

Easy

- Easy temperature setting with intuitive user interface
- Easy to remove shelf system
- Easy to clean interior with rounded corners
- Easy to read large display

Efficient

- Efficient small footprint to optimize benchtop space
- Conveniently stackable without the need for tools or stacking kits
- Efficient utilization of interior with flexible shelf system

2 3 Heratherm General Protocol Microbiological Incubators

Thermo Scientific Heratherm General Protocol incubators have been designed for your routine applications in pharmaceutical, medical, food and research laboratories.

Thermo Scientific

- Gravity convection provides gentle air flow and minimal drying out
- Corrosion resistant stainless steel chamber (AISI 430)
- Intuitive user interface for easy temperature setting
- Large vacuum fluorescent display for easy reading
- Safe view of samples through internal glass door, without impact on temperature
- Automatic overtemperature alarm
- Easy to remove "One Click" - shelf system
- Easy to clean interior with rounded corners
- Efficient small footprint to optimize benchtop space
- Efficient utilization of interior with flexible shelf system
- Tabletop models conveniently stackable without the need for tools or stacking kits
- Lockable casters for easy mobility and stability (floor models only)

Specifications

Temperature range: ambient +5 °C to 75 °C
 Power supply: 230 V/50/60 Hz

Type	Description	Internal volume litres	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	PK	Cat. No.
IGS60	General Protocol	75	530 x 565 x 720	354 x 414 x 508	1	4.009 191
IGS100	General Protocol	117	640 x 565 x 820	464 x 414 x 608	1	4.009 192
IGS180	General Protocol	194	640 x 738 x 920	464 x 589 x 708	1	4.009 193
IGS400	General Protocol	405	778 x 770 x 1545	544 x 569 x 1307	1	9.534 150
IGS750	General Protocol	747	1261 x 770 x 1545	1004 x 569 x 1307	1	9.534 153

1



2



3



Heating/Incubators



1 Heratherm Advanced Protocol Microbiological Incubators

Thermo Scientific Heratherm Advanced Protocol incubators provide exceptional temperature performance for demanding applications.

Thermo Scientific

- Dual convection for application versatility-fan speed adjustable from 0 to 100%
- Advanced digital timer for daily or weekly ON/OFF cycles
- Easy to clean, corrosion-resistant stainless-steel interior (AISI 304)
- Broad temperature range from 5 °C above ambient to 105 °C-suitable for drying applications
- Temperature uniformity of ± 0.6 (Fan off) and between ± 0.2 °C and ± 0.4 C (Fan full speed) (measured at 37 °C)
- Temperature stability of ± 0.1 °C (measured at 37 °C)
- Intuitive user interface for setting temperature
- Large, easy to read vacuum fluorescent display
- Internal glass door allows sample viewing without impacting temperature
- Exceptionally small footprint

Specifications

Temperature range: ambient +5 °C to 105 °C

Type	Description	Internal volume litres	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	PK	Cat. No.
IMH60	Advanced Protocol	66	530 x 565 x 720	354 x 368 x 508	1	4.009 194
IMH100	Advanced Protocol	104	640 x 565 x 820	464 x 368 x 608	1	4.009 195
IMH180	Advanced Protocol	178	640 x 738 x 920	464 x 543 x 708	1	4.009 196
IMH60 SS*	Advanced Protocol	66	530 x 565 x 720	354 x 368 x 508	1	4.009 200
IMH100 SS*	Advanced Protocol	104	640 x 565 x 820	464 x 368 x 608	1	4.009 201
IMH180 SS*	Advanced Protocol	178	640 x 738 x 920	464 x 543 x 708	1	4.009 202



2 Heratherm Advanced Protocol Security Incubators

Thermo Scientific Heratherm Advanced Protocol Security incubators incorporate additional safety features for ultimate sample protection.

Thermo Scientific

- Lockable incubator door for restricted access
- Audible alarm if the door is left open accidentally
- Automatic over- and under temperature alarm
- 140 °C decontamination, contaminating microorganisms are reduced to a minimum, comparable to sterilisation, within a six hour cycle. No need for separate autoclaving of interior fittings. Certified by an accredited microbiological institute.

Specifications

Temperature range: ambient +5 °C to 105 °C
Power supply: 230V, 50/60Hz

Type	Description	Internal volume litres	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	PK	Cat. No.
IMH60-S	DUAL convection	66	530 x 565 x 720	354 x 368 x 508	1	4.009 197
IMH100-S	DUAL convection	104	640 x 565 x 820	464 x 368 x 608	1	4.009 198
IMH180-S	DUAL convection	178	640 x 738 x 920	464 x 543 x 708	1	4.009 199
IMH60-S SS*	DUAL convection	66	530 x 565 x 720	354 x 368 x 508	1	4.009 203
IMH100-S SS*	DUAL convection	104	640 x 565 x 820	464 x 368 x 608	1	4.009 204
IMH180-S SS*	DUAL convection	178	640 x 738 x 920	464 x 543 x 708	1	4.009 205
IMH400-S	Mechanical convection	381	778 x 770 x 1545	544 x 569 x 1335	1	9.534 151
IMH400-S SS	Mechanical convection	381	778 x 770 x 1545	544 x 569 x 1335	1	9.534 152
IMH750-S	Mechanical convection	702	1261 x 770 x 1545	1004 x 569 x 1335	1	9.534 154
IMH750-S SS	Mechanical convection	702	1261 x 770 x 1545	1004 x 569 x 1335	1	9.534 155

*Stainless steel housing.

Accessories for Heratherm Microbiological Incubators

Thermo Scientific

Description	PK	Cat. No.
Wire mesh shelf for 60L Incubators including 2 shelf supports, 338 mm x 336mm	1	4.009 239
Wire mesh shelf for 100L Incubators including 2 shelf supports, 448 mm x 336mm	1	4.009 240
Wire mesh shelf for 180L Incubators including 2 shelf supports, 448 mm x 511 mm	1	4.009 241
Kit for stacking 60L units	1	4.009 246
Kit for stacking 100L units	1	4.009 247
Kit for stacking 180L units	1	4.009 248
Perforated stainless steel insert for all 400 litre Incubators	1	9.534 169
Perforated stainless steel insert for all 750 litre Incubators	1	9.534 170
Silicone free viton door sealing for all 400 litre Incubators	1	9.534 171
Silicone free viton door sealing for all 750 litre Incubators	1	9.534 172

1 Hybridisation Incubator 7601

For exact hybridisations of DNA and RNA probes with nucleic acid on filter paper and for incubations of protein blots with antibodies. The small quantity of hybridisation liquid that is required enables the user to work with high concentrations of probes or antibodies. Other applications are also possible. Instead of the removable rotating rack, the Incubator's interior can be equipped with up to five, non-tilt and pull-out, trays (accessories). The unit carries the CE mark.

- microprocessor-controlled temperature regulation. Temperature range: approx. 8 °C above ambient to +99.9 °C, Temperature constancy (temporal): ±0.5 °C. Temperature setting and display: digital - LED, in 0.1 °C increments.
- the ventilator ensures optimum temperature distribution throughout the cabinet interior
- overtemperature cut-out: electronic, with visual alarm at 4°C above the set temperature, and electro-mechanical >130 °C. Electronic monitoring.
- variable rotating rack for up to 8 hybridisation bottles 51 mm dia. or 16 hybridisation bottles 32 mm dia. Rack rotation speed: 10 per minute, fixed
- soft-touch keys with clear symbols
- clear view of the interior cabinet through a large 16mm thick, heat-insulating, acrylic glass window
- key to switch on two 25 W cabinet lamps temporarily
- interior parts of rotating rack made of stainless steel
- two clip wheels with 8 spring clips (type 7937) and 4 hybridisation bottles (type 7945) are included as standard
- housing: electrolytically galvanized sheet steel
- W x D x H (internal): 400 x 330 x 380 mm W x D x H (external): 585 x 630 x 650 mm
- supply requirements: 230V 50/60Hz, 650W (other voltages are available - details on request)
- weight: 45kg

GFL



Type	PK	Cat. No.
7601	1	9.535 601

2 Spring Clips for Hybridisation Incubator 7601

Spring clips 7935, 7936, 7937. To attach hybridisation bottles onto the clip wheels. Two spring clips are required for each bottle. The required fixings are supplied with each clip. Eight spring clips 7937 are in the standard scope of supply.

GFL



Type	For diam. mm	PK	Cat. No.
7935	32 (16/32) *	1	9.535 635
7936	38 (8/16) *	1	9.535 636
7937	51 (8/16) *	1	9.535 637

* Maximum number of clips per clip plate/number of clips required.

3 Special Hybridisation Bottles

Accessories for Hybridisation Incubator 7601 (see also GFL Tube Roller Incubator 4020). Borosilicate glass, with plastic screw cap perforated with 0.5 mm centre hole for pressure compensation (also available unperforated on request).

GFL

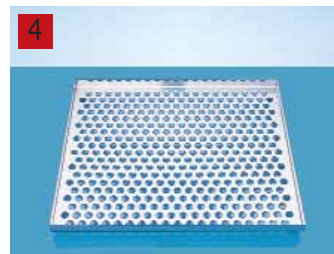


Type	Diam. mm	Length mm	Max. bottles per rack	PK	Cat. No.
7943	32	273	16	1	9.535 643
7944	38	273	8	1	9.535 644
7945	51	273	8	1	9.535 645

4 Perforated Tray for Hybridisation Incubator 7601

Perforated tray 7914. Stainless steel, can only be used instead of the rotating rack, max. five trays.

GFL



Type	PK	Cat. No.
7914	1	9.535 614



1 Incubator, mechanical control, B 28 series

Robust, small, space-saving unit with mechanical controller and adjustable ventilation for accurate and reliable incubation.

BINDER

- Temperature range: 30 °C to 70 °C
- Inner glass door
- Available with, or without, TB (Class 1)

Type	Internal volume litres	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	PK	Cat. No.
B28	28	580 x 425 x 405	400 x 250 x 280	1	9.883 556
B28*	28	580 x 425 x 405	400 x 250 x 280	1	9.883 557

* with TB (Class 1)



2 Incubators, BD, BF series - Classic.Line

BINDER incubators stand for optimal incubation and for results that are reproducible in every routine test, even under high batch throughputs in long-term operation.

BINDER

Serie BD: Incubators with gravity convection.
Serie BF: Incubators with forced convection.

Equipment:

- Temperature range: from 5 °C above room temperature to 100 °C
- Independent temperature safety device class 3.1 (DIN 12880) with optical and audible temperature alarm
- RS 422 interface for use with APT-COM™ DataControlSystem communication software
- Inner door made of tempered safety glass

Type	Internal volume litres	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	PK	Cat. No.
BD 23	20	435 x 520 x 495	222 x 277 x 330	1	9.883 599
BD 400	400	1235 x 765 x 1025	1000 x 500 x 800	1	9.883 603
BD 720	720	1235 x 865 x 1530	1000 x 600 x 1200	1	9.883 604
BF 400	400	1235 x 765 x 1025	1000 x 500 x 800	1	6.203 549
BF 720	720	1235 x 865 x 1530	1000 x 600 x 1200	1	9.883 625



3 Incubators, BD, BF series - Avantgarde.Line

NEW

BINDER

The new Avantgarde.Line incubators, with their exceptional efficiency and perfect temperature accuracy thanks to the very latest APT.line™ technology has the real appeal.

Series BD: Incubator with natural convection
Series BF: Incubator with forced convection

Equipment:

- Temperature range Series BD: ambient temperature plus 5 °C to 100 °C
- Temperature range Series BF: ambient temperature plus 7-8 °C to 100 °C
- Controller with LCD display
- Electromechanical control of the exhaust air flap
- Inner door made of tempered safety glass
- 2 chrome-plated racks
- Stackable up to 115L
- Class 3.1 integrated independent temperature safety device (DIN 12880) with visual alarm
- USB port for recording data

Type	Internal volume litres	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	PK	Cat. No.
BF 56	59	560 x 565 x 625	400 x 340 x 440	1	4.658 058
BF 115	115	710 x 605 x 735	550 x 380 x 550	1	6.280 293
BF 260	260	810 x 760 x 965	610 x 545 x 760	1	6.270 115
BD 56	57	560 x 565 x 625	360 x 380 x 420	1	6.280 269
BD 115	115	710 x 605 x 735	510 x 420 x 530	1	6.280 290
BD 260	260	940 x 760 x 965	610 x 545 x 760	1	6.280 291

Cooling incubators, KB, KT series

Series KB: Cooling incubators with compressor technology, for safe, reproducible incubation, even at high ambient temperatures.

BINDER

Series KT: Cooling incubators with thermoelectric cooling, combines exceptional performance with low energy consumption.

- Temperature range: -5 °C to 100 °C
- Adjustable fan speed Controller with time-segment and real-time programming
- Inner door made of tempered safety glass
- 2 stainless steel racks
- Class 3.1 independent temperature safety device (DIN 12880) with visual and audible temperature alarm
- Computer interface: Ethernet or RS 422
- Data recording and USB interface (Series KT)

Type	Internal volume litres	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	PK	Cat. No.
KT 53	52	660 x 630 x 635	400 x 334 x 400	1	6.280 289
KT 115	102	860 x 655 x 715	600 x 355 x 455	1	6.280 268
KT 170	163	860 x 655 x 1025	600 x 355 x 765	1	6.269 765
KB 23	20	435 x 600 x 620	222 x 277 x 330	1	9.883 528
KB 53	53	635 x 665 x 840	400 x 330 x 400	1	9.883 568
KB 115	115	835 x 730 x 1025	600 x 400 x 480	1	9.883 569
KB 240	240	930 x 880 x 1460	650 x 485 x 785	1	9.883 570
KB 400	400	930 x 880 x 1945	650 x 485 x 1270	1	9.883 571
KB 720	720	1255 x 970 x 1925	970 x 576 x 1250	1	9.883 572



6.269 765

2 Thermostatic cabinets

The incubators from AQUALYTIC® are designed for continuous tempering for different applications, mainly for the determination of BOD, the storage of wastewater samples, and the determination of enzymatic activity. The temperature range is +2 °C up to +40 °C and can be regulated in steps of 0.1 °C. Temperature tolerance is defined with ±1 °C respectively ±0.5 °C (at 20 °C). Low energy consumption due to reinforced isolation. The interior of the cabinets is equipped with sockets for connecting stirrers. There are 4 models available with standard doors from 135 to 445 litres net capacity, and 2 models with glass doors with 140 and 255 litres net capacity. Illuminated LED display with actual/setpoint display.

AQUALYTIC

- Temperature range 2 °C to 40 °C, continuously adjustable in steps of 0.1 °C
- Low power consumption
- Illuminated LED display of preset and current temperatures
- Ideal for BOD determination at 20 °C
- Power sockets inside the incubator
- 6 models in 4 sizes
- Standard door or glass door



Specifications

Coolant: R134a
 Fan: Axial, delivery rate 320m³/h
 Power supply: 220-230V/50Hz

Capacity	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	Weight kg	Temp. range max. °C	PK	Cat. No.
135	600 x 600 x 850	513 x 441 x 704	39.00	+2 ... +40	1	9.699 142
175	600 x 610 x 1250	470 x 440 x 1062	51.00	+2 ... +40	1	9.699 143
255	600 x 610 x 1640	470 x 440 x 1452	61.00	+2 ... +40	1	9.699 144
445	750 x 730 x 1640	600 x 560 x 1452	78.50	+2 ... +40	1	9.699 145
140	600 x 600 x 850*	513 x 441 x 702	48.00	+2 ... +40	1	9.699 146
256	600 x 610 x 1640*		77.00	+2 ... +40	1	9.699 147

* With glass door

Storage cooled chamber, IPS

Sample storage incubating and cooling in the food industry, medicine, the cosmetics industry, or pharmaceuticals. The storage cooled incubators with Peltier elements heat and cool seamlessly with one system.

Memmert

Working-temperature range/setting temperature range: + 14°C to +45 °C.
 With gentle, fan-assisted, air circulation via Peltier fan.
 Further equipment see IPP models

Type	Internal volume litres	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	Shelf support ribs/shelves	Weight kg	PK	Cat. No.
IPS260	256	824 x 774* x 1183	640 x 490 x 800	9/2	113	1	9.538 011
IPS750	749	1224 x 874* x 1726	1040 x 590 x 1200	14/2	230	1	9.538 012

* Depth without door handle, please add 56 mm



9.538 012

Heating/Cooling incubators

1



1 Refrigerated incubators IMP

NEW

Thermo Scientific

- Outstanding temperature uniformity and stability to keep the samples in a safe environment
- CFC free/HFC free polyurethane insulation foam for outstanding temperature performance and condensation prevention
- Sophisticated timer function with weekly/daily or real time mode
- Intuitive programmability function for defined temperature ramping, soak/cool and dwell: store up to 10 programs with 10 temperature steps, loop program, and select mode at end of cycle
- Adjustable over-temperature shut-off for protocols that require setting of over temperature for protection (class 2 according to norm DIN12880)
- Fan speed adapts automatically to achieve optimal temperature performance

Specifications

Temperature range: +5 °C to +70 °C
 Temperature uniformity: ±0.3 °C (at +25 °C) and stability, ±0.1 °C
 Power supply: 230 V, 50/60 Hz

Type	Internal volume litres	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	Weight kg	PK	Cat. No.
IMP180	180	640 x 738 x 920	464 x 543 x 708	84	1	6.284 917
IMP400	400	778 x 770 x 1545	544 x 524 x 1335	167	1	6.284 918
IMP180*	180	640 x 738 x 920	464 x 543 x 708	84	1	6.287 660
IMP400*	400	778 x 770 x 1545	544 x 524 x 1335	167	1	6.287 661

* with internal socket EU.

2 Peltier cooled incubators IPP and IPPplus

The cooled incubators with the unique ControlCOCKPIT for a quick and intuitive operation. Heating and cooling seamlessly with one system thanks to Peltier technology. Environmentally friendly and energy-saving. Vibration-free and extremely quiet.

Standard equipment:

- PID microprocessor control with integrated auto-diagnostic system
- Interior of stainless steel material 1.4301 (ASTM 304) with all-round deep-drawn ribs to integrate the large-area heating with ceramic-metal sheath, very stable and easy to clean
- Structured stainless steel housing, scratch-resistant, robust and durable; rear of zinc-plated steel (size 750 mounted on lockable castors)
- High-temperature connectors on the rear of the appliance for single-phase power connection according to country specific systems and IEC standards
- Internal data logger with a storage capacity of at least 10 years
- German, English, French, Spanish, Polish, Czech, Hungarian language settings available on the ControlCOCKPIT
- Digital backwards counter with target time setting adjustable between 1 minute and 99 days
- The SetpointWAIT function guarantees that the process time does not start until the set temperature is reached at all measuring points - optional for temperature values recorded by the freely positionable Pt100 sensors inside the chamber.
- Adjustment of three calibration values for temperature and additional appliance specific parameters directly at the ControlCOCKPIT

Type designation: plus = Models with TwinDISPLAY

Specifications

Working temperature range without light: 0 (at least 20 °C below ambient) to +70 °C
 Working temperature range with light: +10 to +40 °C
 Setting temperature range: 0 to +70 °C
 Setting accuracy: 0.1 °C
 Power supply: 230 V, 50/60 Hz; 115 V, 50/60 Hz no extra cost

2



9.538 009

Peltier incubators IPP

SingleDISPLAY: ControlCOCKPIT with one TFT colour display

Memmert

- Available parameters on the ControlCOCKPIT: Temperature (Celsius or Fahrenheit), fan speed, exhaust air flap position, programme time, time zones, summertime/wintertime
- One temperature sensor Pt100 DIN class A in a 4-wire circuit
- AtmoCONTROL software for reading out, managing and organising the data logger via Ethernet interface (temporary trial version can be downloaded). USB stick with AtmoCONTROL software available as accessory (on demand)
- Ethernet interface on the rear of the appliance for reading out the protocol log and for online logging
- Double overtemperature protection: Electronic temperature monitoring with freely adjustable monitoring temperature with option A6 TWW/TWB (protection class 3.1 or 2), mechanical temperature limiter TB acc. to DIN 12880

Type	Internal volume	External dimensions (W x D x H)	Internal dimensions (W x D x H)	Shelf support ribs/shelves	Weight	PK	Cat. No.
	litres	mm	mm		kg		
IPP30	32	585 x 524** x 704	400 x 250* x 320	3 / 1	40	1	9.538 001
IPP55	53	585 x 604** x 784	400 x 330* x 400	4 / 1	52	1	9.538 002
IPP110	108	745 x 674** x 864	560 x 400* x 480	5 / 2	78	1	9.538 003
IPP260	256	824 x 774** x 1183	640 x 500* x 800	9 / 2	114	1	9.538 004
IPP750	749	1224 x 874** x 1726	1040 x 600* x 1200	14 / 2	230	1	9.538 005

* Minus 10 mm for fan - Peltier
 **Depth without door handle, please add 56 mm

Peltier incubators IPPplus

TwinDISPLAY: ControlCOCKPIT with two colour displays

Memmert

- Available parameters on the ControlCOCKPIT: Temperature (Celsius or Fahrenheit), fan speed, exhaust air flap position, programme time, time zones, summertime/wintertime
- Two Pt100 sensors DIN class A in a 4-wire circuit for mutual monitoring, taking over functions in case of an error
- AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port
- HeatBALANCE function for application specific adjustment of heat output distribution (balance) between the upper and lower heating groups in an adjustment range between -50 % and +50 % (not valid for IPP110plus)
- ControlCOCKPIT with USB port for uploading programmes, reading out protocol logs, activating the User-ID function
- Displaying of already logged protocol data on the ControlCOCKPIT (max 10.000 values correspond to approx. 1 week)
- Ethernet interface on the rear of the appliance for reading out the protocol log and for uploading programmes and for online logging
- Multiple overtemperature protection: Electronic temperature monitoring TWW/TWB (protection class 3.3 or 2 resp. 3.3 for units with active cooling) and mechanical temperature limiter TB (protection class 1) acc. to DIN 12880, AutoSAFETY automatically adjusts to the set value within a freely adjustable tolerance range. Setting individual MIN/MAX values for over/undertemperature

Type	Internal volume	External dimensions (W x D x H)	Internal dimensions (W x D x H)	Shelf support ribs/shelves	Weight	PK	Cat. No.
	litres	mm	mm		kg		
IPP30plus	32	585 x 524** x 704	400 x 250* x 320	3 / 1	40	1	9.538 006
IPP55plus	53	585 x 604** x 784	400 x 330* x 400	4 / 1	52	1	9.538 007
IPP110plus	108	745 x 674** x 864	560 x 400* x 480	5 / 2	78	1	9.538 008
IPP260plus	256	824 x 774** x 1183	640 x 500* x 800	9 / 2	114	1	9.538 009
IPP750plus	749	1224 x 874** x 1726	1040 x 600* x 1200	14 / 2	230	1	9.538 010

Type designation: plus = Models with TwinDISPLAY
 *Minus 10 mm for fan - Peltier
 **Depth without door handle, please add 56 mm



9.538 002



9.538 008

Heating/Cooling incubators

1



9.538 017

Cooled incubators with compressor cooling ICP

The cooled incubators with the unique ControlCOCKPIT for a quick and intuitive operation. Ideal at temperatures around zero and below.

Memmert

For rapid and precise alternation between heating up and cooling down times in ramp operation. Extraordinarily quiet.

Standard equipment:

- PID microprocessor control with integrated auto-diagnostic system
- Interior stainless steel, material 1.4301 (ASTM 304) very stable and easy to clean
- Structured stainless steel housing, scratch-resistant, robust and durable; rear of zinc-plated steel (all sizes mounted on lockable castors)
- High-temperature connectors on the rear of the appliance for single-phase power connection according to country specific systems and IEC standards
- Internal data logger with a storage capacity of at least 10 years
- German, English, French, Spanish, Polish, Czech, Hungarian language settings available on the ControlCOCKPIT
- Digital backwards counter with target time setting adjustable between 1 minute and 99 days
- The SetpointWAIT function guarantees that the process time does not start until the set temperature is reached at all measuring points - optional for temperature values recorded by the freely positionable Pt100 sensors inside the chamber.
- Adjustment of three calibration values for temperature and additional appliance specific parameters directly at the ControlCOCKPIT

TwinDISPLAY: ControlCOCKPIT with two TFT colour displays

- Available parameters on the ControlCOCKPIT: Temperature (Celsius or Fahrenheit), fan speed, exhaust air flap position, programme time, time zones, summertime/wintertime
- Two Pt100 sensors DIN class A in a 4-wire circuit for mutual monitoring, taking over functions in case of an error
- AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port
- ControlCOCKPIT with USB port for uploading programmes, reading out protocol logs, activating the User-ID function
- Displaying of already logged protocol data on the ControlCOCKPIT (max 10.000 values correspond to approx. 1 week)
- Ethernet interface on the rear of the appliance for reading out the protocol log and for uploading programmes and for online logging
- Multiple overtemperature protection: Electronic temperature monitoring TWW/TWB (protection class 3.3 or 2) and mechanical temperature limiter TB (protection class 1) acc. to DIN 12880, AutoSAFETY automatically adjusts to the set value within a freely adjustable tolerance range. Setting individual MIN/MAX values for over/undertemperature alarm

Specifications

Working temperature range: -12 to +60 °C (ICP55: 0 to +60 °C)

(not suitable for long-term storing at sub-zero temperatures. During permanent operation, the glass door may ice over)

Setting temperature range: -12 to +60 °C (ICP55: -5 to +60 °C)

Setting accuracy: 0.1 °C

Power supply: 230 V, 50/60 Hz; 115 V, 50/60 Hz at extra cost

Type	Internal volume litres	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	Shelf support ribs/shelves	Weight kg	PK	Cat. No.
ICP55	53	585 x 514** x 1153	400 x 330* x 400	4/1	89	1	9.538 013
ICP110	108	745 x 584** x 1233	560 x 400* x 480	5/2	113	1	9.538 014
ICP260	256	824 x 684** x 1552	640 x 500* x 800	9/2	157	1	9.538 015
ICP450	449	1224 x 784** x 1613	1040 x 600* x 720	8/2	217	1	9.538 016
ICP750	749	1224 x 784** x 1950	1040 x 600* x 1200	14/2	249	1	9.538 017

* Minus 33 mm for fan

**Depth without door handle, please add 56 mm



1 CO₂ Incubators CellCulture®

The CellCulture® CO₂ incubators from Esco are widely used in scientific research to grow and maintain cell cultures. Typical fields of application include tissue engineering, neuroscience, cancer research and other mammalian cell research applications.

Esco



- Fast and uniform temperature and CO₂ control
- HEPA filtration system with internal blower (some models)
- Capacitive humidity sensor
- IR CO₂-sensor with automatic auto zero
- Quick recovery time for temperature, CO₂ and humidity after door opening
- Stainless steel 1.4301 (AISI 304) or copper interior
- 90 °C moist heat decon system
- Easy to clean due to removable lids and inner door
- Serial RS485 communication port
- Low maintenance demand
- Stackable

More options like additional shelves, stacking kits, rollerbase or chart recorders on request

CO₂ Incubators CellCulture® with Stainless steel interior/Air jacket



Esco

Type	Internal volume	Internal dimensions (W x D x H)	External dimensions (W x D x H)	Shelf support ribs/shelves	Rating	Weight	PK	Cat. No.
	litres	mm	mm		W	kg		
With ULPA Filter	50	345 x 375 x 390	500 x 500 x 655	3 (max. 4)	880	70	1	6.287 238
With ULPA Filter	170	505 x 530 x 635	660 x 725 x 900	4 (max. 7)	2000	120	1	6.287 239
Without ULPA Filter	170	505 x 530 x 635	660 x 725 x 900	4 (max. 7)	2640	120	1	6.287 240
With ULPA Filter	240	595 x 620 x 635	750 x 770 x 900	4 (max. 7)	2640	155	1	6.287 241
Without ULPA Filter	240	595 x 620 x 635	750 x 770 x 900	4 (max. 7)	2640	155	1	6.287 242

CO₂ Incubators CellCulture® with Copper interior/Air jacket



Esco

Type	Internal volume	Internal dimensions (W x D x H)	External dimensions (W x D x H)	Shelf support ribs/shelves	Rating	Weight	PK	Cat. No.
	litres	mm	mm		W	kg		
With ULPA Filter	50	345 x 375 x 390	500 x 500 x 655	3 (max.4)	880	70	1	6.287 243
With ULPA Filter	170	505 x 530 x 635	660 x 725 x 900	4 (max. 7)	2000	120	1	6.287 244
With ULPA Filter	240	595 x 620 x 635	750 x 770 x 900	4 (max. 7)	2640	155	1	6.287 245

CO₂ Incubators CellCulture® with Stainless steel interior/Water jacket



Esco

Type	Internal volume	Internal dimensions (W x D x H)	External dimensions (W x D x H)	Shelf support ribs/shelves	Rating	Weight	PK	Cat. No.
	litres	mm	mm		W	kg		
With ULPA Filter	50	345 x 375 x 390	500 x 500 x 655	3 (max. 4)	880	70	1	6.287 246
With ULPA Filter	170	505 x 530 x 635	660 x 725 x 900	4 (max. 7)	2000	120	1	6.287 247
With ULPA Filter	240	595 x 620 x 635	750 x 770 x 900	4 (max. 7)	2640	155	1	6.287 248

1



1 CO₂ Incubators ICO

NEW

Memmert

The new CO₂ Incubators with the unique ControlCOCKPIT with TwinDISPLAY. Safety at all times: When it comes to safety and user friendliness, the highly modern CO₂ incubator ICO is the perfect solution: Thanks to the battery-buffered ControlCOCKPIT, the operating display, logging and CO₂ control remain fully functional even when there is a power failure. All parameters are logged in accordance with the FDA and, when individually adjusted ranges for CO₂, O₂, temperature and humidity are exceeded, notifications can be sent to a mobile phone in addition to an alarm. With its rounded corners, the interior is easy to clean and can be sterilized for 60 minutes at 180 °C (including all sensors).

Standard equipment:

- Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays
- Digital electronic CO₂ control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation
- Interior made of stainless steel 1.4301 (ASTM 304), deep-drawn, seamlessly welded, with rounded corner, with perforated stainless steel shelves (size 50: 1, sizes 105 - 240: 2) and 1 stainless steel water dish (all sizes)
- Large-area multi-functional heating system on four sides with additional door and back heating to avoid condensation
- Housing made of textured stainless steel, rear zinc-plated steel
- Fully insulated stainless steel door and heated inner glass door
- Operation and setting of all parameters via ControlCOCKPIT
- High-temperature connectors on the rear of the appliance for single-phase power connection according to country specific systems and IEC standards
- Internal data logger with a storage capacity of at least 10 years
- German, English, French, Spanish, Polish, Czech, Hungarian language settings available on the ControlCOCKPIT
- Digital backwards counter with target time setting, adjustable from 1 minute to 99 days
- The SetpointWAIT function guarantees that the process time does not start until the set temperature is reached at all measuring points - optional for temperature values recorded by the freely positionable Pt100 sensors inside the chamber
- Adjustment of three calibration values for temperature and additional appliance specific parameters directly at the ControlCOCKPIT
- Works calibration certificate (measuring point chamber centre) at +37 °C, 5 % CO₂ for standard units
- Works calibration certificate at 37 °C, 5 % CO₂ and 90 % rh (requires option K7), standard equipment for units with active humidity control
- Works calibration certificate at 37 °C, 5 % CO₂, 90 % rh and 10 % O₂ (requires option K7 and option T6); standard equipment for units with O₂ control

Accessories on request.

Specifications

Working-temperature range	5 °C above ambient up to +50 °C (standard sterilisation programme: 60 minutes at 180 °C (without removing the sensors))
Setting temperature range:	+18 °C up to +50 °C
Setting accuracy temperature:	0.1 °C
Humidity limitation thanks to a Peltier element:	when water dish is full and inserted, the Peltier element limits the value of relative humidity in the interior to 93 % rh ±2.5 %
Setting range active humidity control:	40 to 97 % rh and rh-Off
Setting accuracy humidity:	0.5 % rh
CO ₂ -Concentration:	0 to 20 %
O ₂ -Concentration:	1 to 20 %
Setting accuracy CO ₂ :	0.1 %
Setting accuracy O ₂ :	0.1 %
Power supply:	230 V, 50/60 Hz

Type	Internal volume	Internal dimensions (W x D x H)	External dimensions (W x D x H)	Shelf support ribs/shelves	Rating	Weight	PK	Cat. No.
	litres	mm	mm		W	kg		
ICO50med	56	400 x 330* x 425	559 x 521** x 791***	5/1	1000	55	1	6.283 118
ICO105med	107	560 x 400* x 480	719 x 591** x 846***	6/2	1500	75	1	6.283 119
ICO150med	156	560 x 400* x 700	719 x 591** x 1066***	10/2	2000	90	1	6.283 120
ICO240med	241	600 x 500* x 810	759 x 691** x 1176***	12/2	2000	110	1	6.283 121

* less 35 mm for fan

**depth without door handle, depth of door handle 56 mm

***variable through adjustable feet

1 CO₂ incubators C 170 **NEW**

BINDER

The C 170 CO₂ incubator has been designed for standard applications in the cell culture laboratory. It provides a reproducible control for the cell well-being parameters while also ensuring the best possible levels of contamination safety in the incubator thanks to its straightforward design.

Equipment:

- Temperature range: room temperature plus 7 °C to 50 °C
- Humidity range: up to 95 % RH
- Auto-sterilization with hot air at 180 °C
- Humidification system with condensation protection
- CO₂ sensor with infrared technology
- Seamless, deep-drawn inner stainless steel chamber
- 3 perforated stainless steel shelves
- Units are stackable with stacking adapter

Type	Description	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	PK	Cat. No.
C 170	left hinged door	740 x 715 x 870	560 x 500 x 600	1	6.280 287
C 170	right hinged door	740 x 715 x 870	560 x 500 x 600	1	6.280 288

2 CO₂ incubators, CB series with sterilizable sensor

BINDER

The BINDER CB is particularly suitable for incubating sensitive cells while also guaranteeing the best possible conditions for cell cultures during both the production process and cell-based screenings. This BINDER incubator is even suitable for complex cultivation experiments with individual environments and hypoxic conditions.

Equipment:

- Temperature range: 7 °C above room temperature up to 60 °C
- Seamless, deep-drawn inner stainless steel chamber
- Auto-sterilization with hot air at 180 °C
- Hot-air sterilizable CO₂ sensor with infrared technology
- Double-pan humidification system with condensation protection
- Internal data recording and USB interface
- Computer interface: Ethernet

Type ending G- with divided inner door

Type ending O-with O₂ control

Type ending GO-with O₂ control and divided inner door

Type	Internal volume litres	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	Weight kg	PK	Cat. No.
CB060-230V	53	580 x 545 x 720	400 x 330 x 400	60.00	1	9.883 726
CB060-230V-O	53	580 x 545 x 720	400 x 330 x 400	63.00	1	9.883 738
CB060-230V-G*	53	580 x 550 x 720	400 x 330 x 400	65.00	1	9.883 732
CB060-230V-GO*	53	580 x 550 x 720	400 x 330 x 400	68.00	1	9.883 744
CB160-230V	150	680 x 715 x 920	500 x 500 x 600	68.00	1	9.883 727
CB160-230V-O	150	680 x 715 x 920	500 x 500 x 600	106.00	1	9.883 739
CB 160-230V-G*	150	680 x 715 x 920	500 x 500 x 600	68.00	1	9.883 733
CB160-230V-GO*	150	680 x 715 x 920	500 x 500 x 600	110.00	1	9.883 745
CB220-230V	210	740 x 715 x 1070	560 x 500 x 750	121.00	1	9.883 728
CB220-230V-O	210	740 x 715 x 1070	560 x 500 x 750	125.00	1	9.883 740
CB220-230V-G**	210	740 x 715 x 1070	560 x 500 x 750	129.00	1	9.883 734
CB220-230V-GO**	210	740 x 715 x 1070	560 x 500 x 750	132.00	1	9.883 746

*with 4 times divided inner door

**with 6 times divided inner door



Heating/Shaking incubators

1



9.837 926

2



9.837 927

3



9.837 929

Shaking Incubators 3031, 3032 and 3033 with Orbital Motion

GFL

Specialising in gentle mixing as well as vigorous shaking, GFL Shaking Incubators are used for applications that require exactly reproducible orbital motions and temperatures of up to +70 °C, e.g. incubations, fermentations, homogenisations, chemical and biochemical reactions, enzyme and tissue studies, as well as for bacterial culture. The units carry the CE mark.

Incubation time, temperature and shaking frequency regulation are microprocessor-controlled. Fast and exact temperature setting, exact reproducibility of set values.

- built-in RS232 interface for data transfer of measurement, control and adjustment tasks via PC.
- temperature range: from 8 °C above ambient to +70 °C. Serial cooling coil for operation below ambient temperature. Operation with cooling coil: +20 °C to +70 °C (dependent on cooling media and ambient temperature)
- temperature constancy (temporal): ±0.2 °C
- soft-touch keys with clear symbols
- setting and display of temperature (in 0.1 °C increments), shaking frequency and incubation time: digital - LED.
- optimum temperature distribution throughout the cabinet interior with a ventilator
- electronic monitoring of the temperature controller. Over-temperature cut-out: electrical/dependent on the set value, to protect the test substances, and electro-mechanically, to protect the unit. Under-temperature cut-out: electrical, max. 9.9 °C below set temperature.
- shaking motion: orbital, can be switched on and off.
- silent and robust shaking mechanism with gentle start-up.
- Incubation time: 1 minute to 999:59 hours
- the microprocessor-controlled timer continuously displays the remaining period of the incubation process and triggers an audible alarm at the finish
- Maximum load 3031/3032/3033: 12kg/12kg/20kg
- Supply requirements: 230V 50/60 Hz, 0.8kW (other voltages are available on request)

Type 3031:

Lift-up, transparent acrylic cover. Volume/capacity: approx. 46 litres/1 shaking tray. Outer casing made of heavy-duty ABS and powder-coated, electrolytically galvanized sheet steel. The aluminium shaking platform includes four plastic pins to accept a shaking tray or a universal mount (accessories).

- shaking frequency: 20 to 250 rpm max.

Type 3032 (one-door design)/Type 3033 (two-door design):

Acrylic window panels. Volume: approx. 45 L/approx. 150 L, capacity: 2 shaking trays (for vessel heights > 150 mm/180 mm: 1 shaking tray).

Outer casing in powder-coated, electrolytically galvanized sheet steel.

Interior cabinet, the insides of the doors and the shaking platform are stainless steel.

The frame, permitting the use of two shaking trays, is included.

A fluorescent lamp for interior illumination is separated from the interior cabinet by a diffusing screen.

- Shaking speed type 2032: 20 to max. 250 rpm
- Shaking speed type 3033: 20 to max. 250 rpm, if only bottom tray is fitted, max. 200 rpm, if both trays are fitted

Type	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	Amplitude mm	Max. kg	Weight kg	PK	Cat. No.
3031	525 x 665 x 570	450 x 450 x 280	30	12	38.50	1	9.837 926
3032	710 x 650 x 710	450 x 300 x 320	25	12	70.00	1	9.837 927
3033	930 x 890 x 820	674 x 540 x 430	25	20	135.00	1	9.837 929

4



4 Trays for Shaking Incubators

Tray 3966 for Shaking Incubator 3031 and GFL Shakers 3011 to 3018

GFL

Stainless steel, 450 mm x 450 mm. With holes to accept clamps for Erlenmeyer flasks and other accessories.

Tray 3970 for Shaking Incubator 3032

Stainless steel, 450 mm x 300 mm. With holes to accept clamps for Erlenmeyer flasks and other accessories.

Tray 3980 for Shaking Incubator 3033 and GFL Shakers 3019 to 3020

Anodised aluminium, 670 mm x 537mm. With holes to accept clamps for Erlenmeyer flasks and other accessories.

Type	For Type	PK	Cat. No.
3966	3011 - 1018 / 3031	1	9.837 936
Tray 3970	3032	1	9.837 990
Tray 3980	3033 / 3019 / 3020	1	9.837 980

1 Clamps for Erlenmeyer Flasks

Clamps for Shaking Incubators 3031/3032/3033 with orbital motion, to be screwed onto **trays 3966, 3970 and 3980**. Made of stainless steel. Complete with fixing material (see also GFL Shakers 3005 to 3020).



Type	For flasks ml	Clips required shaker Model 3966	Clips required shaker Model 3970	Clips required shaker Model 3980	PK	Cat. No.
3983	25	79	52	99	1	9.837 983
3984	50	49	33	99	1	9.837 984
3985	100	36	22	50	1	9.837 985
3986	200	22	15	26	1	9.837 986
3987	250-300	16	13	26	1	9.837 987
3988	500	12	10	26	1	9.837 988
3989	1000	9	6	12	1	9.837 989
3990	2000		3	9	1	9.837 991

3032 (Shaking tray 3970): Clamps for 300 ml and larger: 1 tray only can be used
 3033 (Shaking tray 3980): Clamps for 1000 ml and larger: 1 tray only can be used

Other clamps on request

➔ Other Accessories for GFL Shaking Incubators (Test Tube Racks, Holding Frame for a test plate, Non-slip Rubber Mat, Universal Mount) see GFL Shakers, page 497.

Shaking incubators SI500/SI600/SI600C



These combined shakers and incubators are ideal for scientists doing cell culturing procedures, especially suspension culture applications. All units are compact enough to be positioned on the laboratory bench.

When SI600C is combined with the SRC4 recirculating cooler, or equivalent, the SI600C can operate at temperatures down to 15 °C below ambient (min. 5 °C). On the SI600C all viewing windows are also double glazed to prevent condensation. The Incubators have a versatile clamping system which secures most sizes and mixtures of flask up to 1 litre on the SI500 and 2 litres on the SI600 and SI600C. Typically, the SI500 platform will accommodate the following Erlenmeyer flasks: 12 x 250 ml, or 9 x 500 ml or 4 x 1000 ml while the SI600 and SI600C can accommodate the following: 6 x 2000 ml, 9 x 1000 ml or 15 x 500 ml.

- Microprocessor controlled
- 51 or 115 Litre capacity available
- Digital display for temperature and speed
- Timer from 1 second to 9 days
- USB connection
- Unique retractable platform for easy loading and unloading
- With alarm function



9.951 612

Specifications

Temperature range	
SI500 + SI600:	Amb. +5 °C to + 60 °C
SI600C:	Amb. -15 °C (min. 5 °C) to 60 °C*
Display resolution:	0.1 °C
Precision:	±0.5 °C at 37 °C
Fluctuation:	±0.5 °C at 37 °C
Variation:	< 0.5 °C at 37 °C
Speed range:	30 to 300 rpm
Platform size	
SI500 // SI600 + SI600C:	335 x 335 mm // 526 x 390 mm
Max. vessel height	250 mm // 300 mm
SI500 // SI600 + SI600C:	
Volume	
SI500 // SI600 + SI600C:	51 l // 115 l
Max. load	
SI500 + SI600C // SI600:	10 kg // 15 kg
Heater power	
SI500 // SI600 + SI600C:	250 W // 400 W
Supply requirements:	230 V, 50 Hz

Type	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	Amplitude mm	Weight kg	PK	Cat. No.
SI500	450 x 474 x 522	422 x 408 x 297	16.0	30.00	1	9.951 612
SI600	675 x 542 x 640	660 x 470 x 395	16.0	55.00	1	9.645 351
SI600C	675 x 562(592**) x 640	625 x 455 x 380	16.0	60.00	1	6.287 436
SRC4	232 x 497 x 490	-	-	-	1	6.287 437

* Requires separate recirculating cooler (6.287 437)
 ** 592 mm with cooling connectors attached

Heating/Shaking incubators

1


1 Shaking Incubator, SI505

NEW

Stuart

The SI505 has been designed specifically to combine a bench top laboratory incubator with the specific mixing action required for microtitre plates. With a tight orbit of 1.5 mm and a high speed shaking action between 250 rpm and 1250 rpm even the smallest of vessels can be adequately mixed.

To minimize sample evaporation the SI505 is supplied with stainless steel water trays, these are strategically placed within the unit to maintain a humidity of up to 80%, thus dramatically reducing sample evaporation over a 24 hour period.

Specifications

Temperature range:	Amb.+7 °C to 60 °C
Samples:	4 x microplates or 2 x microtube racks
Display resolution:	0.1 °C
Precision:	±0.5 °C at 37 °C
Fluctuation:	±0.5 °C at 37 °C
Variation:	< 0.6 °C at 37 °C
Speed range:	250 to 1250 rpm
Timer:	min/sec, hr/min, days/hrs
Platform size:	220 x 220 mm
Max. load:	1kg
Heater power:	200W
Supply requirements:	230V 50Hz

Type	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	Amplitude mm	Weight kg	PK	Cat. No.
SI505	361 x 405 x 430	307 x 300 x 190	1.5	22.50	1	9.645 350

2


6.251 451

Shaking Incubators ES-20/ES-80

Grant

Stable and reliable orbital shaker-incubator for vigorous or even mixing and incubation of samples in a variety of flasks and vessels. For Life Sciences, suitable for growing cell cultures in flasks, extracting tissue samples at physiological, temperatures, and sample preparation processes, mixing of biological liquids as well as the incubation and cultivation of biological liquids, growing e-coli, bioluminescence preparation.

- Variable speed: 50 to 250 rpm
- Digital control of time, temperature and shaking speed for accuracy and repeatability
- Display 2-line 16 character LCD
- Interchangeable platforms for shaking/incubating different vessels (please order separately)

Specifications

Speed range:	50 to 250 rpm
Temperature range ES-20:	+25 to 42 °C
Temperature range ES-80:	+25 to 80 °C
Temperature setting resolution:	0.1 °C
Stability:	±0.5 °C
Shaking movement:	orbital
Orbit ES-20:	10 mm
Orbit ES-80:	20 mm
Continuous operation ES-20:	720 hrs
Continuous operation ES-80:	168 hrs
Timer:	1min to 96 hrs
Load capacity ES-20:	2.5 kg
Load capacity ES-80:	8 kg
Power supply:	230V 50/60Hz
Supply requirements:	230V 50/60Hz

3


9.721 056

Type	Dimensions (W x D x H) mm	PK	Cat. No.
ES-20	340 x 340 x 435	1	6.251 451 2
ES-80	590 x 525 x 510	1	9.721 056 3

More shaking incubators, please see page 864.